

Title (en)

Angular speed detecting apparatus for crankshaft of internal combustion engine

Title (de)

Vorrichtung zum Ermitteln der Winkelgeschwindigkeit für eine Kurbelwelle eines Verbrennungsmotors

Title (fr)

Appareil de détection de la vitesse angulaire pour vilebrequin de moteur à combustion interne

Publication

EP 1918557 A1 20080507 (EN)

Application

EP 07017033 A 20070830

Priority

JP 2006294122 A 20061030

Abstract (en)

An angular speed detecting apparatus for a crankshaft of an internal combustion engine. The angular speed detecting apparatus detects a rotational angular speed of the crankshaft based on an output of a pulse generator which generates a crank pulse at every predetermined rotational angle of the crankshaft. An average value of a speed parameter indicating a rotational angular speed of the crankshaft is calculated using the data sampled at intervals of $720/N$ degrees where N is a number of cylinders of the engine. A learning correction coefficient for correcting the speed parameter is calculated according to the average value. The speed parameter is corrected using the learning correction coefficient.

IPC 8 full level

F02D 41/34 (2006.01); **G01P 3/481** (2006.01); **G01P 3/489** (2006.01); **G01P 21/02** (2006.01)

CPC (source: EP US)

F02D 41/0097 (2013.01 - EP US); **G01P 3/489** (2013.01 - EP US); **F02D 41/2451** (2013.01 - EP US)

Citation (applicant)

JP 3571043 B2 20040929

Citation (search report)

- [X] US 5528931 A 19960625 - JAMES JOHN V [US], et al
- [A] US 6250144 B1 20010626 - BIRK MANFRED [DE], et al
- [A] US 5428991 A 19950704 - KLENK MARTIN [DE], et al

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EP2495421A4

Designated contracting state (EPC)

DE GB

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1918557 A1 20080507; **EP 1918557 B1 20130123**; CN 100564850 C 20091202; CN 101173639 A 20080507; JP 2008111354 A 20080515; JP 4339347 B2 20091007; US 2008098806 A1 20080501; US 7614290 B2 20091110

DOCDB simple family (application)

EP 07017033 A 20070830; CN 200710167449 A 20071025; JP 2006294122 A 20061030; US 89700007 A 20070907